

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10|572,740  
Source: IFWP  
Date Processed by STIC: 3-31-06

***ENTERED***



IFWP

## RAW SEQUENCE LISTING

DATE: 03/31/2006

PATENT APPLICATION: US/10/572,740

TIME: 12:14:54

Input Set : A:\sequencelisting.txt

Output Set: N:\CRF4\03292006\J572740.raw

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5 <110> APPLICANT: Micromet AG
9 <120> TITLE OF INVENTION: Multispecific deimmunized CD3 binders
13 <130> FILE REFERENCE: G 2728 PCT
C--> 17 <140> CURRENT APPLICATION NUMBER: US/10/572,740
C--> 17 <141> CURRENT FILING DATE: 2006-03-21
17 <160> NUMBER OF SEQ ID NOS: 409
21 <170> SOFTWARE: PatentIn version 3.1
25 <210> SEQ ID NO: 1
27 <211> LENGTH: 729
29 <212> TYPE: DNA
31 <213> ORGANISM: artificial sequence
35 <220> FEATURE:
37 <223> OTHER INFORMATION: wt Anti-CD3 cassette
39 <400> SEQUENCE: 1
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42 tcctgcaaga cttctggcta cacctttact aggtacacga tgcactgggt aaaacagagg      120
44 cctggacagg gtctggaatg gattggatac attaataccta gccgtgggta tactaattac      180
46 aatcagaagt tcaaggacaa ggccacattg actacagaca aatcctccag cacagcctac      240
48 atgcaactga gcagcctgac atctgaggac tctgcagtct attactgtgc aagatattat      300
50 gatgatcatt actgccttga ctactggggc caaggcacca ctctcacagt ctctcagtc      360
52 gaaggtggaa gtggaggttc tgggtggaagt ggaggttcag gtggagtcga cgacattcag      420
54 ctgaccagcag ctccagcaat catgtctgca tctccagggg agaaggtcac catgacctgc      480
56 agagccagtt caagtgtaag ttacatgaac tggtaccagc agaagtcagg cacctcccc      540
58 aaaagatgga tttatgacac atccaaagtg gcttctggag tcccttatcg cttcagtggc      600
60 agtgggtctg ggacctcata ctctctcaca atcagcagca tggaggctga agatgctgcc      660
62 acttattact gccaacagtg gagtagtaac ccgctcacgt tcggtgctgg gaccaagctg      720
64 gagctgaaa
67 <210> SEQ ID NO: 2
69 <211> LENGTH: 243
71 <212> TYPE: PRT
73 <213> ORGANISM: artificial sequence
77 <220> FEATURE:
79 <223> OTHER INFORMATION: wt Anti-CD3 cassette
81 <400> SEQUENCE: 2
83 Asp Ile Lys Leu Gln Gln Ser Gly Ala Glu Leu Ala Arg Pro Gly Ala
84 1          5          10          15
87 Ser Val Lys Met Ser Cys Lys Thr Ser Gly Tyr Thr Phe Thr Arg Tyr
88          20          25          30
91 Thr Met His Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
92          35          40          45
95 Gly Tyr Ile Asn Pro Ser Arg Gly Tyr Thr Asn Tyr Asn Gln Lys Phe
96          50          55          60
99 Lys Asp Lys Ala Thr Leu Thr Thr Asp Lys Ser Ser Ser Thr Ala Tyr

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Input Set : A:\sequencelisting.txt

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100 65          70          75          80
103 Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
104          85          90          95
107 Ala Arg Tyr Tyr Asp Asp His Tyr Cys Leu Asp Tyr Trp Gly Gln Gly
108          100          105          110
111 Thr Thr Leu Thr Val Ser Ser Val Glu Gly Gly Ser Gly Gly Ser Gly
112          115          120          125
115 Gly Ser Gly Gly Ser Gly Gly Val Asp Asp Ile Gln Leu Thr Gln Ser
116          130          135          140
119 Pro Ala Ile Met Ser Ala Ser Pro Gly Glu Lys Val Thr Met Thr Cys
120 145          150          155          160
123 Arg Ala Ser Ser Ser Val Ser Tyr Met Asn Trp Tyr Gln Gln Lys Ser
124          165          170          175
127 Gly Thr Ser Pro Lys Arg Trp Ile Tyr Asp Thr Ser Lys Val Ala Ser
128          180          185          190
131 Gly Val Pro Tyr Arg Phe Ser Gly Ser Gly Ser Gly Thr Ser Tyr Ser
132          195          200          205
135 Leu Thr Ile Ser Ser Met Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys
136          210          215          220
139 Gln Gln Trp Ser Ser Asn Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu
140 225          230          235          240
143 Glu Leu Lys
147 <210> SEQ ID NO: 3
149 <211> LENGTH: 18
151 <212> TYPE: PRT
153 <213> ORGANISM: artificial sequence
157 <220> FEATURE:
159 <223> OTHER INFORMATION: deimmunized linker
161 <400> SEQUENCE: 3
163 Gly Glu Gly Thr Ser Thr Gly Ser Gly Gly Ser Gly Gly Ser Gly Gly
164 1          5          10          15
167 Ala Asp
171 <210> SEQ ID NO: 4
173 <211> LENGTH: 729
175 <212> TYPE: DNA
177 <213> ORGANISM: artificial sequence
181 <220> FEATURE:
183 <223> OTHER INFORMATION: VH2/VL1
185 <400> SEQUENCE: 4
186 gacgtccaac tgggtgcagtc aggggctgaa gtgaaaaaac ctggggcctc agtgaaggtg      60
188 tcctgcaagg cttctggcta caccgctact aggtacacga tgcactgggt aaggcaggca      120
190 cctggacagg gtctggaatg gattggatac attaataccta gccgtgggta tactaattac      180
192 gcacagaagt tgcagggccg cgtcacaaatg actacagaca cttccaccag cacagcctac      240
194 atggaactga gcagcctgcg ttctgaggac actgcaacct attactgtgc aagatattat      300
196 gatgatcatt actgccttga ctactggggc caaggcacca cggtcaccgt ctctcaggc      360
198 gaaggtacta gtactgggtc tgggtggaagt ggaggttcag gtggagcaga cgacattcag      420
200 atgacccagt ctccatctag cctgtctgca tctgtcgggg accgtgtcac catcacctgc      480
202 agagccagtc aaagtgtaag ttacatgaac tggtagcagc agaagccggg caaggcaccc      540
204 aaaagatgga tttatgacac atccaaagtg gcttctggag tcctgtctcg cttcagtggc      600

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206 agtgggtctg ggaccgacta ctctctcaca atcaacagct tggaggctga agatgctgcc      660
208 acttattact gccaacagtg gagtagtaac ccgctcacgt tcggtggcgg gaccaaggtg      720
210 gagatcaaa                                                                729
213 <210> SEQ ID NO: 5
215 <211> LENGTH: 243
217 <212> TYPE: PRT
219 <213> ORGANISM: artificial sequence
223 <220> FEATURE:
225 <223> OTHER INFORMATION: VH2/VL1
227 <400> SEQUENCE: 5
229 Asp Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
230 1                    5                    10                    15
233 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Ala Thr Arg Tyr
234                20                25                30
237 Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
238                35                40                45
241 Gly Tyr Ile Asn Pro Ser Arg Gly Tyr Thr Asn Tyr Ala Gln Lys Leu
242                50                55                60
245 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
246 65                70                75                80
249 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Thr Tyr Tyr Cys
250                85                90                95
253 Ala Arg Tyr Tyr Asp Asp His Tyr Cys Leu Asp Tyr Trp Gly Gln Gly
254                100               105               110
257 Thr Thr Val Thr Val Ser Ser Gly Glu Gly Thr Ser Thr Gly Ser Gly
258                115               120               125
261 Gly Ser Gly Gly Ser Gly Gly Ala Asp Asp Ile Gln Met Thr Gln Ser
262                130               135               140
265 Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys
266 145               150               155               160
269 Arg Ala Ser Gln Ser Val Ser Tyr Met Asn Trp Tyr Gln Gln Lys Pro
270                165               170               175
273 Gly Lys Ala Pro Lys Arg Trp Ile Tyr Asp Thr Ser Lys Val Ala Ser
274                180               185               190
277 Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Ser
278                195               200               205
281 Leu Thr Ile Asn Ser Leu Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys
282                210               215               220
285 Gln Gln Trp Ser Ser Asn Pro Leu Thr Phe Gly Gly Gly Thr Lys Val
286 225               230               235               240
289 Glu Ile Lys
293 <210> SEQ ID NO: 6
295 <211> LENGTH: 729
297 <212> TYPE: DNA
299 <213> ORGANISM: artificial sequence
303 <220> FEATURE:
305 <223> OTHER INFORMATION: VH2/VL2
307 <400> SEQUENCE: 6
308 gacgtccaac tggtgcagtc aggggctgaa gtgaaaaaac ctggggcctc agtgaaggtg      60

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## RAW SEQUENCE LISTING

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310 tcctgcaagg cttctggcta caccgctact aggtacacga tgcactgggt aaggcaggca 120
312 cctggacagg gtctggaatg gattggatac attaataccta gccgtgggta tactaattac 180
314 gcacagaagt tgcagggccg cgtcacaatg actacagaca cttccaccag cacagcctac 240
316 atggaactga gcagcctgcg ttctgaggac actgcaacct attactgtgc aagatattat 300
318 gatgatcatt actgccttga ctactggggc caaggcacca cggtcaccgt ctctcaggc 360
320 gaaggtacta gtactggttc tgggtggaagt ggagggttcag gtggagcaga cgacattgta 420
322 ctgacccagt ctccagcaac tctgtctctg tctccagggg agcgtgccac cctgagctgc 480
324 agagccagtc aaagtgtgta ttacatgaac tgggtaccagc agaagccggg caaggcaccc 540
326 aaaagatgga tttatgacac atccaaagtg gcttctggag tccctgctcg cttcagtggc 600
328 agtgggtctg ggaccgacta ctctctcaca atcaacagct tggaggctga agatgctgcc 660
330 acttattact gccaacagtg gagtagtaac ccgctcacgt tcggtggcgg gaccaagggtg 720
332 gagatcaaa 729
335 <210> SEQ ID NO: 7
337 <211> LENGTH: 243
339 <212> TYPE: PRT
341 <213> ORGANISM: artificial sequence
345 <220> FEATURE:
347 <223> OTHER INFORMATION: VH2/VL2
349 <400> SEQUENCE: 7
351 Asp Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
352 1 5 10 15
355 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Ala Thr Arg Tyr
356 20 25 30
359 Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
360 35 40 45
363 Gly Tyr Ile Asn Pro Ser Arg Gly Tyr Thr Asn Tyr Ala Gln Lys Leu
364 50 55 60
367 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
368 65 70 75 80
371 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Thr Tyr Tyr Cys
372 85 90 95
375 Ala Arg Tyr Tyr Asp Asp His Tyr Cys Leu Asp Tyr Trp Gly Gln Gly
376 100 105 110
379 Thr Thr Val Thr Val Ser Ser Gly Glu Gly Thr Ser Thr Gly Ser Gly
380 115 120 125
383 Gly Ser Gly Gly Ser Gly Gly Ala Asp Asp Ile Val Leu Thr Gln Ser
384 130 135 140
387 Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
388 145 150 155 160
391 Arg Ala Ser Gln Ser Val Ser Tyr Met Asn Trp Tyr Gln Gln Lys Pro
392 165 170 175
395 Gly Lys Ala Pro Lys Arg Trp Ile Tyr Asp Thr Ser Lys Val Ala Ser
396 180 185 190
399 Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Ser
400 195 200 205
403 Leu Thr Ile Asn Ser Leu Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys
404 210 215 220
407 Gln Gln Trp Ser Ser Asn Pro Leu Thr Phe Gly Gly Gly Thr Lys Val
408 225 230 235 240

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Input Set : A:\sequencelisting.txt

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417 <211> LENGTH: 729
419 <212> TYPE: DNA
421 <213> ORGANISM: artificial sequence
425 <220> FEATURE:
427 <223> OTHER INFORMATION: VH2/VL3
429 <400> SEQUENCE: 8
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432 tcctgcaagg cttctggcta caccgctact aggtacacga tgcactgggt aaggcaggca      120
434 cctggacagg gtctggaatg gattggatac attaatccta gccgtgggta tactaattac      180
436 gcacagaagt tgcagggccg cgtcacaatg actacagaca cttccaccag cacagcctac      240
438 atggaactga gcagcctgcg ttctgaggac actgcaacct attactgtgc aagatattat      300
440 gatgatcatt actgccttga ctactggggc caaggcacca cggtcaccgt ctctcaggc      360
442 gaaggtacta gtactggttc tgggtggaagt ggagggttcag gtggagcaga cgacattgta      420
444 ctgacccagt ctccagcaac tctgtctctg tctccagggg agcgtgccac cctgacctgc      480
446 agagccagtt caagtgtaag ttacatgaac tgggtaccagc agaagccggg caaggcaccc      540
448 aaaagatgga tttatgacac atccaaagtg gcttctggag tccttgctcg cttcagtggc      600
450 agtgggtctg ggaccgacta ctctctcaca atcaacagct tggaggctga agatgctgcc      660
452 acttattact gccaacagtg gagtagtaac ccgctcacgt tcggtggcgg gaccaaggtg      720
454 gagatcaaa                                     729
457 <210> SEQ ID NO: 9
459 <211> LENGTH: 243
461 <212> TYPE: PRT
463 <213> ORGANISM: artificial sequence
467 <220> FEATURE:
469 <223> OTHER INFORMATION: VH2VL3
471 <400> SEQUENCE: 9
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474 1          5          10          15
477 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Ala Thr Arg Tyr
478          20          25          30
481 Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
482          35          40          45
485 Gly Tyr Ile Asn Pro Ser Arg Gly Tyr Thr Asn Tyr Ala Gln Lys Leu
486          50          55          60
489 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
490 65          70          75          80
493 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Thr Tyr Tyr Cys
494          85          90          95
497 Ala Arg Tyr Tyr Asp Asp His Tyr Cys Leu Asp Tyr Trp Gly Gln Gly
498          100         105         110
501 Thr Thr Val Thr Val Ser Ser Gly Glu Gly Thr Ser Thr Gly Ser Gly
502          115         120         125
505 Gly Ser Gly Gly Ser Gly Gly Ala Asp Asp Ile Val Leu Thr Gln Ser
506          130         135         140
509 Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Thr Cys
510 145         150         155         160
513 Arg Ala Ser Ser Ser Val Ser Tyr Met Asn Trp Tyr Gln Gln Lys Pro

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**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/572,740

DATE: 03/31/2006

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Input Set : A:\sequencelisting.txt

Output Set: N:\CRF4\03292006\J572740.raw

L:17 M:270 C: Current Application Number differs, Replaced Current Application No

L:17 M:271 C: Current Filing Date differs, Replaced Current Filing Date



**STATISTICS SUMMARY**

PATENT APPLICATION: US/10/572,740

DATE: 03/31/2006

TIME: 12:14:55

Input Set : A:\sequencelisting.txt

Output Set: N:\CRF4\03292006\J572740.raw

Application Serial Number: US/10/572,740

Alpha or Numeric or Xml: Numeric

Application Class:

Application File Date: 03-21-2006

Art Unit: IFWP

Software Application: PatentIN3.1

Total Number of Sequences: 409

Total Nucleotides: 205538

Total Amino Acids: 68665

Number of Errors: 0

Number of Warnings: 0

Number of Corrections: 2

**MESSAGE SUMMARY**

270 C: 1 (Current Application Number differs)

271 C: 1 (Current Filing Date differs)